Drones and Airports – Stranger Things Have Happened
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John Dermody, FAA Airport Safety and Standards

Bill Stanton, FAA UAS and Commercial Space Operational Integration

Jim Patterson, FAA Airport Safety R&D Section

Chaim Van Prooyen, Hartsfield-Jackson Atlanta International Airport

Steve Weidner, National Air Traffic Controllers Association (NATCA)

#UAS2019
INTEGRATING UAS AT ATL

Tuesday, June 4, 2019

By Chaim Van Prooyen
Project Manager | UAS Program Coordinator
AIRPORT OVERVIEW

4,700-acre campus

2 terminals, 7 concourses

192 gates

5 Parallel Runways

9 Main Parallel Taxiways

107.3 Mil Passengers in 2018

Flights per day – 2,500+
First UAS flight in Class B airspace under Part 107

First UAS flight over a commercial service airport runway (9L / 27R)

5th Runway (10 / 28) aerial night capture for Mayor’s 5K race

Integration of UAS for capital construction projects

SMS – Safety Risk Assessment & Live SOP
UAS OPERATIONS AT ATL SINCE PART 107

18 UAS Operations

Operations Safe and Successful
INTEGRATING UAS FOR CAPITAL PROJECTS
INTEGRATING UAS FOR CAPITAL PROJECTS
RUNWAY 9L / 27R
CASE STUDY
Automated PCI Data Collection

RUNWAY 9L / 27R
CASE STUDY

Imaging Data Summary

VNIR - Visible to Near Infrared

SWIR - Short Wave Infrared
Automated PCI Data Collection

RUNWAY 9L / 27R

CASE STUDY

Full LiDAR Data

LiDAR Return Intensity

Height Color; Red High, Blue Low
Automated PCI Data Collection

RUNWAY 9L / 27R
CASE STUDY

SWIR Spectral Analysis

SWIR S.A.M. Material Classes and Colors

RGB Image of SWIR FOD Stripe

Spectral Angle Mapping Classification of SWIR FOD Stripe
THANK YOU!

PHOTO CREDITS:
3DR, AIRBUS AERIAL, ATKINS, C.W. MATTHEWS, GEORGIA TECH|CONNECTECH LAB / P2K & MICHAEL BAKER INTL
Morning Plenary starts at 8 AM

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